

XLE Fact Sheet — Linux Installation

Miriam Butt

February 16, 2009

1 Calling up XLE

XLE is a program that runs within Unix. We have no fancy icons (yet). And so you will need to work within the real Unix environment.

- To get that, you need to call up the Terminal. In Linux, that means going under “Applications” next to the red hat and then going to “System Tools” (or “Accessories”) and there selecting “Terminal”.

If you are lucky, you might have a picture of a terminal somewhere on your screen. And then you can just click on that.

- Now you should have a window with a *command line* and a *prompt* ending with a `$`.
- You can call up XLE from anywhere in your Terminal. This is because we have specified where XLE is to be found in your `.bashrc` configuration file. To call up XLE, type `xle` at the prompt (try it).
- However, it is best to call up XLE in the directory/folder you have your grammar in and to do so within the text editor *emacs*, this makes things more comfortable.

2 Text Editors

Note that you can use any text editor with XLE. In particular, if you want to work with Unicode, emacs is not so great and you will probably want to use something else (like TextEdit). However, to get started, we will use emacs since it has a nice interface to XLE.

3 Location of Things

3.1 Grammars

- You should create a directory/folder where you will work on your grammars in your home directory or on your Desktop. Call this something like: *grammars*.
- To make a new directory/folder in Unix, type: `mkdir Name-of-Directory`
- To move around in Unix, use the `cd` (= change directory) command. This works like this:
 - `cd name-of-directory`
 - to go up just one level/directory: `cd ..`
 - to look around in a directory/folder: `ls` (=list)
 - to see which directory/folder you are in: `pwd`
 - to copy one file (file1) to another file (file2): `cp file1 file2`

4 Documentation

To access the XLE Documentation, either point your browser at: `/usr/local/xle/doc/xle_toc.html` OR if you have an internet connection, at:
`http://www2.parc.com/is1/groups/nl1tt/xle/doc/xle_toc.html`

The documentation is *incredibly* comprehensive. If you look, you will find information on just about everything.

5 Working on a Grammar

Assume you are in the directory where you want to work on your grammar. It's most convenient to use *emacs*, since it comes with an inbuilt LFG mode.

- Type at the Prompt: `emacs Name-of-your-file.lfg &`
- Note that if you leave out the `&`, then your Terminal will be busy with just the emacs process and will not be able to do other things. The `&` tells the Terminal to be ready for other processes as well, enabling you to type other commands, such as `cd` or so into this same Terminal.
- Work on your grammar as needed.

- To run your grammar in XLE do the following.
 - In emacs go on the LFG button and click on: **Start a New XLE Process**. XLE should start.
 - Now you need to tell XLE what grammar you want to parse with: `create-parser Name-of-your-file.lfg`. Your grammar should now be loaded.
 - Try parsing a sentence: `parse {some-sentence}` or `parse ‘‘some-sentence’’`
 - If you make changes to your grammar, always save it (to save in emacs, either go under **File** and then choose **Save Buffer**, or use CTRL-x CTRL-s.
 - If you make changes to your rules or template sections, you need to issue the command `create-parser` again.

6 Things to Make Life Easier

You don't have to type out everything – Unix tries to be helpful.

- If you are typing at the command-line, you can use the **tab** on your keyboard to *complete* the name of the file or directory. For example:


```
cd toy- [hit tab and it will complete the directory name for you]
```
- If you are running XLE in emacs, you don't have to type everything again either. Just put your cursor on the command or parse you want to do again and hit enter.
- In emacs, if you want a new window, go under **File** and click on **New Frame**.
- In emacs, if you want to split your current window into two windows, go under **File** and click on **Split Window**.
- When you are working on your grammar in emacs, you can use **Esc-q** to format the rules. This is also useful for debugging, since if you have forgotten a `;` (this happens often), the rule won't format properly.
- If you want to comment out a rule or a lexical entry or just add a comment, put the material between double quotes: `’’This is a comment.’’`

- If you get stuck at the Terminal and it is not responding, try CTRL-c.
This kills processes.
- To save a file either go under **File** and use **Save Buffer As**, or use
CTRL-x CTRL-s.